MINUTES OF TOWN PLAN COMMISSION MEETING TOWN OF UNION

JUNE 17, 2008

The following were present: Doug Zweizig, Eric Larsen, Dave Pestor, Kim Gruebling, Doug Lee, Renee Exum, Greg Hoffmeister, Tom Alisankus, and Matt Dregne.

- 1. The Commission discussed and approved the minutes from the June 9, 2008 meeting.
- 2. The Commission identified the following issues that needed to be discussed and resolved:
 - A. Definition of health and safety.
 - B. Issues relating to multiple affected properties.
 - C. The setback standard of 1,000 ft. or five times the rotor diameter from a property line.
 - D. The need for a better understanding of the "German standard" referred to in the ordinance.
- 3. The Commission approved the following definition of "health": "A state of complete physical and mental well being, not merely the absence of disease or infirmity." This definition was adapted from the World Health Organization definition of health in "Guidelines for Community Noise," pages 19 and 20.
- 4. The Commission adopted the following definition of "mental health": "Mental health covers a variety of symptoms, ranging from anxiety, emotional stress, nervous complaints, nausea, headaches, instability, argumentativeness, sexual impotency, changes in general mood and anxiety, and social conflicts, to more general psychiatric categories like neurosis, psychosis, and hysteria." This definition is based on the definition of mental health set forth in the World Health Organization publication "Guidelines for Community Noise," at page 146.
- 5. The Commission adopted the following definition of "safety: "Unharmed; free from danger or injury."
- 6. The Commission discussed a number of questions relating to the "German standard of 35 dB(A) for rural nighttime environments" used in the draft ordinance. Tom Alisankus reported that the German standard is based upon the German Federal Clean Air Act adopted in 1974. Cathy Bembinster said that the standard of 35 dB(A) means 35 dB(A) outside, measured at the recipient's property line. Jim Bembinster explained that the World Health Organization

- standard for noise measured inside a dwelling is 30 dB(A), unless the noise is low frequency, or continuous, in which case a different noise level applies.
- 7. Tom Alisankus distributed a copy of a document entitled, "Noise-Con 2008 Sample Guidelines for Siting Wind Turbines to Prevent Health Risks," and another document entitled, "Noise-Con 2007 Communicating the Noise Effects of Wind Farms to Stakeholders," and another document entitled "Basics of Sound".
- 8. The Commission agreed that the ordinance should be revised to include a more detailed explanation of the "German standard."
- 9. The Commission discussed whether agreements entered into by landowners to allow shorter setbacks should apply to tenants. Following the discussion, the Commission arrived at a consensus view that landowners can enter agreements to shorten setback requirements, and that tenants are not required to approve such agreements.
- 10. The Commission agreed to delete the note at the bottom of page 19 and the top of page 20 of the draft ordinance.
- 11. Kim Gruebling moved, and Eric Larsen seconded, the following motion: "The minimum setback a property owner may agree to shall be not less than 50 feet from an adjoining property line, measured from any part of a wind turbine." This motion failed, with Doug Zweizig, Doug Lee, Dave Pestor and Renee Exum voting no, and Eric Larsen and Kim Gruebling voting yes.
- 12. Renee Exum moved, and Dave Pestor seconded, the following motion: "The minimum setback a landowner may agree to shall be not less than 1.1 times the height of a wind turbine (with height being measured from the top of the rotor diameter) from the nearest adjacent property line, as measured from the center of the wind turbine tower." This motion was adopted, with Doug Zweizig, Dave Pestor, Doug Lee, Eric Larsen and Renee Exum voting yes, and Kim Gruebling voting no.
- 13. Eric Larsen moved, and Dave Pestor seconded, the following motion: The setback described in section J.1.a., at page 18 of the draft ordinance, shall be as follows:

At least 1,000 feet from the nearest property line and at least five times the rotor diameter of the turbine from the property lines of all adjoining property owners who have not granted an easement for a lesser setback. (Windustry-turbines should be sited no less than five times the rotor diameter from property lines, unless written permission is given by the

neighbor. *Explanation*: This recommendation is designed to protect wind rights of all landowners and minimize the impact of wind turbines on neighbors. Wind turbines produce wake effects eight to 11 rotor diameters downwind. Requiring a setback of five rotor diameters from property lines provides a buffer that will protect the wind rights of all landowners in the vicinity of a wind project. We believe clear standards for property line setbacks are critical to preventing disputes over wind rights now and in the future. Without standards, conflicts among neighbors and among wind developers can arise. (Source: Wind Energy Easements and Leases: Best Practices and Policy Recommendations.))

(Note: the above 1,000 ft. setback is consistent with the 1,000 feet from the nearest property line setback in the Town of Stockbridge, Wisconsin, and Manitowoc County.)

This motion was approved, with six members voting yes and zero members voting no.

14. Eric Larsen moved, and Kim Gruebling seconded, the following motion: The setback in section J.1.b. on page 19 of the draft ordinance shall be as follows:

At least 1,000 feet or (3) times the total height of the wind turbine, whichever is greater, from any public road.

This motion was approved, with six members voting yes and zero members voting no.

15. Eric Larsen moved, and Renee Exum seconded, the following motion: The setback in section J.1.c on page 19 of the draft ordinance shall be as follows:

At least 1,000 feet or (3) times the total height of the wind turbine, whichever is greater, from the nearest above-ground public electric power line, telephone line, or railroad right-of-way.

This motion was approved with Doug Zweizig, Dave Pestor, Doug Lee, Eric Larsen and Renee Exum voting yes, zero members voting no, and Kim Gruebling abstaining.

16. Doug Lee moved, and Renee Exum seconded, the following motion: The following language should be added to the end of section J.1.c. on page 19 of the draft ordinance:

Except that a utility or a railroad may agree in writing to a lesser setback of not less than 1.1 times the total height of the wind turbine.

This motion was approved, with six members voting yes, and zero members voting no.

17. The Commission decided by consensus that section J.1.d on page 19 of the draft ordinance should be changed to provide as follows:

At least 2,640 feet from the nearest residence, business, school, day care facility, church, hospital and other structures in which humans live, work or frequent. This setback may increase per sound study results, compliance to the technical requirements sound limits and a shadow flicker study. The setback in this section shall not apply to any structure on a participating parcel.

This motion was not intended to approve the setback distance of 2,640 feet, but rather to better define" inhabited structure."

- 18. Kim Gruebling moved, and Eric Larsen seconded, the following motion: "Discussion of the 2,640 ft. setback shall be tabled until the next meeting." This motion was approved, with six members voting yes, and no members voting no.
- 19. The Commission decided by consensus to add the following definition to the ordinance:

"Participating parcels" means a parcel of land on which a wind energy system is sited in accordance with this ordinance.

20. The Commission had a general discussion of the amount of time needed to finish work on the ordinance. The Commission agreed to amend the notice of the next Plan Commission meeting to allow for a discussion of extending the current moratorium to allow more time to complete work on the ordinance.

The meeting was adjourned.